

ALASKA PIONEER HOME		P&P No: 08.03
Title: MRSA (Methicillin Resistant Staphylococcus Aureus)		Approval: D. COTE
Key Words: Incidence, Symptoms, Exposure, Treatment		
Team: Nursing, Housekeeping, Activity	Effective Date: 8/1/12	Page: 1 of 6

PURPOSE

To give information and explain practices to prevent the transmission of MRSA (Methicillin Resistant Staphylococcus Aureus) in the Alaska Pioneer Homes (AKPH).

POLICY

The AKPH nursing staff cares for and treat residents with a MRSA infection, and prevents the transmission of the infection to other residents, staff, and the environment.

MRSA infection is not a barrier to admission or continued residence in the AKPH.

Standard Precautions are used to care for AKPH residents. Staff uses appropriate barrier precautions to prevent skin and mucous membrane exposure when contact with blood or other body fluids is anticipated.

AKPH housekeeping disinfects the rooms, surfaces, and equipment in the surroundings of the resident who has a MRSA infection.

DEFINITIONS

MRSA (*Methicillin-Resistant Staphylococcus aureus*) is resistant to the antibiotic *Methicillin* and is a form of the bacterium *Staphylococcus aureus*. It commonly lives in the nose and on the skin of a healthy person, and spreads from person to person on contaminated hands, skin, and objects. Most MRSA infections are skin infections, but the germ can also cause blood and joint infections and pneumonia. MRSA is not stronger than other strains of *Staphylococcus aureus*, but treatment options are limited.

Colonization of MRSA is the presence and multiplication of MRSA at a body site without tissue invasion or damage.

Infection with MRSA is the entry and multiplication of MRSA in the tissue of the host where it causes tissue damage.

AKPH P&P No. 08.03	Effective Date: 8/1/12	Page: 2 of 6
Title: MRSA		

Carrier of MRSA is a person who harbors MRSA with no overt expressions of clinical disease, but who is a potential source of infection. Carrying MRSA can be temporary, intermittent, or of long term duration.

Standard Precautions are based on the principle that all blood, body fluids, secretions, excretions except sweat, and non-intact skin are potential sources of infection.

Contact Precautions instruct staff to wear gloves and, at times, a gown for all contact with the resident or potentially contaminated areas in the resident's surroundings.

PROCEDURE

I. Incidence of MRSA Infection

- A. MRSA infection prevalence
 - 1. MRSA infection is a growing threat, and is getting worse.
 - 2. As people age, their immune system is less effective and they are at increased risk for MRSA infection.
- B. Cause of MRSA growth
 - 1. Antibiotic overuse.
 - 2. People don't take the full dose of antibiotics prescribed, and the resistant bacteria that persist after a partial antibiotic dose multiply.
 - 3. Bacterial mutation.
 - 4. Misuse of antibiotics in the animal industry, which ends up in food and water supply, produces a low dose of antibiotics that creates resistance.
- C. Risk factors for acquiring a MRSA infection
 - 1. Residence in a nursing home or long term care (LTC) facility.
 - 2. Elderly or immune-compromised people.
 - 3. Hospital stay, esp. > 14 days.
 - 4. Recent antibiotic use.
 - 5. Invasive device use during medical care.

II. MRSA Infection

- A. Symptoms of MRSA
 - 1. Starts as small red bumps that resemble pimples or spider bites.
 - 2. Similar to other staphylococcus infections – fever and chills, elevated white blood cell count, and drainage from a wound.

AKPH P&P No. 08.03	Effective Date: 8/1/12	Page: 3 of 6
Title: MRSA		

3. Progresses within 24-48 hours of initial topical symptoms, and after 72 hours, the MRSA can take hold in tissue.
4. Within days the red bumps become larger and more painful, and then develop into deep, pus filled boils.
5. The boils progress to deep, painful abscesses that require surgical drainage.
6. The MRSA infection may burrow into the body, causing life-threatening infection in bones, joints, surgical wounds, the blood stream, heart valves, and lungs.

B. Transmission of MRSA infection

1. MRSA is carried from one person to another by contaminated hands, skin, surfaces, and fabric.
2. MRSA is transferred between residents and staff during care, and when contacting objects and surfaces in the environment.
 - a. Surfaces include doorknobs, counters, tables, curtains, and clothing.
3. MRSA most commonly colonizes the anterior nostrils (nares), but also the respiratory tract, open wounds, IV catheters, and urinary tract.
4. MRSA can be transmitted by chronic sinusitis, upper respiratory infection, and dermatitis.

C. Exposure and prevention of MRSA infection to AKPH staff

1. Healthy people are constantly exposed to bacteria like MRSA.
 - a. At any point in time in the US, 30% of people are colonized with MRSA or carry it on their skin.
2. An infection occurs if a sufficient amount of the bacteria enters the body and overwhelms the immune system.
3. AKPH staff can prevent transmission of the infection by keeping their hands and the environment clean.

III. Precautions to Take with Residents who are Colonized or Infected with MRSA

A. Contact precautions are used until the resident's MRSA culture is negative.

1. Clean hands with soap and water or alcohol gel sanitizer; alcohol kills MRSA.

B. Room placement.

1. Private room or shared room with another resident with MRSA is most desirable.
2. Shared room with another resident without MRSA who has intact skin and no invasive tubes, is less desirable.
3. Shared room with another resident who has a different antibiotic resistant infection, is not desirable.

AKPH P&P No. 08.03	Effective Date: 8/1/12	Page: 4 of 6
Title: MRSA		

4. Shared room with another resident who has an open wound, but does not carry MRSA, is least desirable.

C. Group activity.

1. Attends if infected or colonized body sites are securely covered (except nares) and the resident practices good hygiene.
2. Attends if secretions are controlled.
3. For nasal colonization, attends without a mask.
 - a. If the resident has a cold, they must control their secretions by covering their nose and mouth with a tissue when coughing and sneezing.
 - b. Hand washing is emphasized, and staff ensures that the resident washes hands regularly, esp. after a cough or sneeze.
4. For sputum colonization, attends meetings without a mask.
 - a. The mouth and nose are covered with a tissue when coughing.
 - b. A mask is worn with a chronic, uncontrollable cough.
 - c. A tracheostomy tube is covered with a trach collar.
5. Respiratory MRSA infection, such as pneumonia or bronchitis, requires a mask when the resident leaves the room.

D. Personal protective equipment (PPE).

1. Disposable gloves are worn when entering the resident's room with MRSA, and discarded before exiting the room.
2. Hands are washed with soap and water or cleansed with hand gel sanitizer after removing gloves.
3. Precautions are taken when touching surfaces and door handle upon exiting the room.
4. Gowns are worn if contact with the resident extends beyond hands, and changed between residents.
5. Masks and goggles are worn if there is potential for splashing, sneezing, or coughing to the staff's face.
6. Residents who are infected with MRSA in the respiratory tract and are coughing wear a mask when leaving their rooms.

E. Care equipment and room.

1. When possible, dedicate the use of Home equipment solely to the resident with MRSA, to decrease the possibility of bacterial transmission.
2. Enhanced cleaning of the resident's room with a disinfectant is done when they have a MRSA infection; special cleaning methods are not required.

F. Communication with staff.

1. Educate AKPH staff about the MRSA infection.

AKPH P&P No. 08.03	Effective Date: 8/1/12	Page: 5 of 6
Title: MRSA		

2. Communicate about residents with MRSA between nursing shifts, with activity, social work, and housekeeping staff, and with other health care workers.

IV. Treatment for a Resident with Drainage or Secretions Infected with MRSA

- A. Caring for residents with MRSA
 1. Regular and frequent hand washing is important for these residents, and it may require assistance by nursing staff.
 2. Keep wounds covered with a clean, dry bandage to contain the drainage.
 - a. Ensure that the bandage remains intact and dry during activities.
 3. Contact Precautions are followed during wound care and dressing change.
 - a. Contaminated dressing materials are discarded in the regular garbage; if they are dripping, saturated with blood and body fluids, they are discarded in a red biohazard bag.
 4. Instruct the resident and nursing staff to avoid sharing hygiene supplies and personal items and clothing.
 5. Launder resident's soiled clothing and linen in hot water and detergent. Dry clothes in a hot dryer to help destroy bacteria.
- B. If the resident is transported to the hospital ER or to a physician appointment, indicate to the receiving party that the resident has a MRSA infection.
- C. If the resident is deceased
 1. Inform the mortuary of the MRSA infection.
 2. Take the same precautions as when the resident was alive.
 3. Lesions are covered with an impermeable dressing.

V. Ending MRSA Precautions

- A. A resident is free of MRSA after two consecutive cultures of the colonized or infected body site are negative, except for nares.
 1. The first culture is taken 72 hours (3 days) or more after antibiotic treatment is discontinued.
 2. The second culture is taken 7 days after the first.
 3. If a culture remains MRSA positive, the cultures continue to be taken 7 days apart until two consecutive negative cultures is documented.
 4. If a sputum specimen cannot be obtained, the throat may be cultured instead of sputum.
 5. A healed wound site is cultured with a moist swab.

AKPH P&P No. 08.03	Effective Date: 8/1/12	Page: 6 of 6
Title: MRSA		

- B. Contact precautions are discontinued when two consecutive negative cultures are obtained; standard precautions are continued.
- C. Cultures of the nares do not determine precautions or eradication of the MRSA, and are only done in outbreak situations.

HISTORY OF REVISIONS

New: 1/1/12
Revised: 2/28/12; 7/20/12
Reviewed: 2/28/12

ATTACHMENTS

REFERENCES